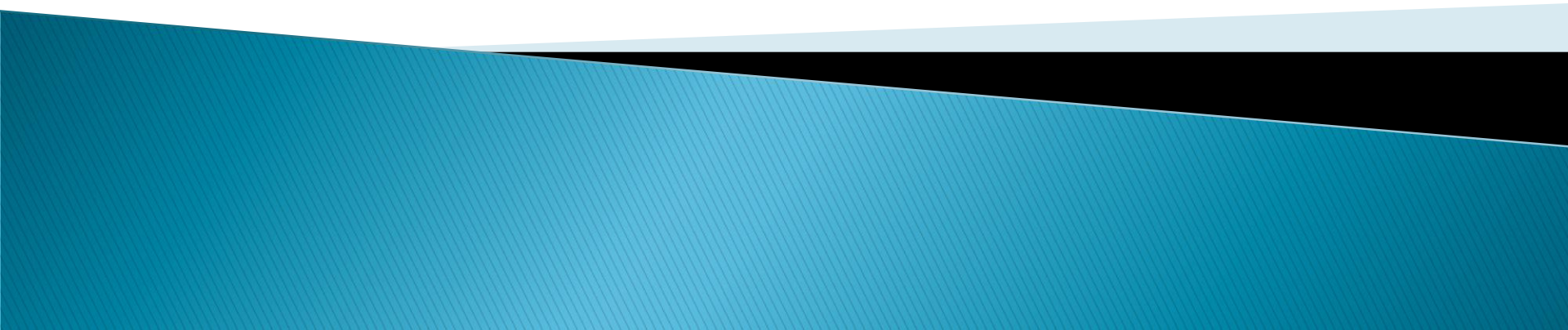
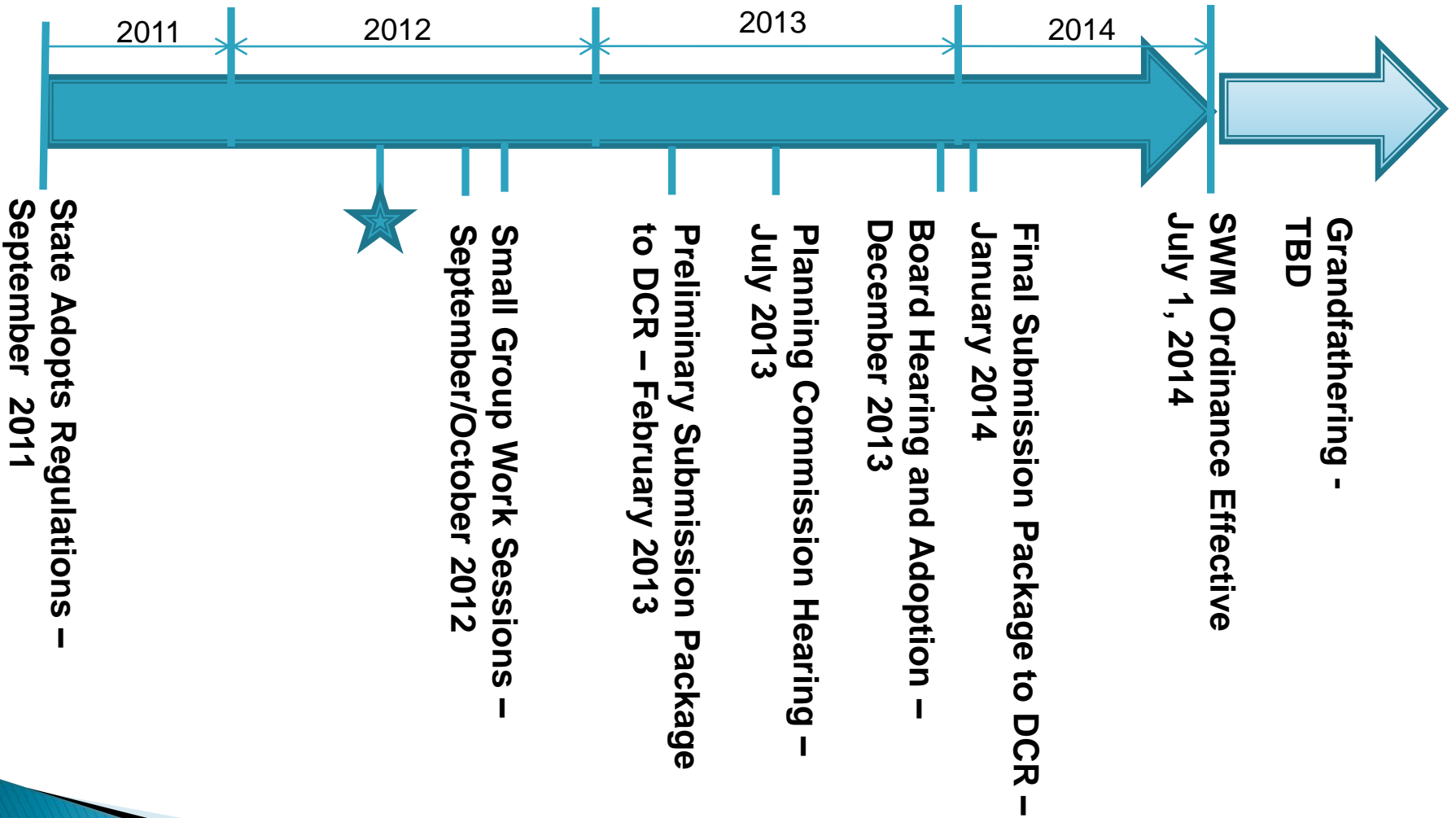


Fairfax County Stormwater Management Ordinance

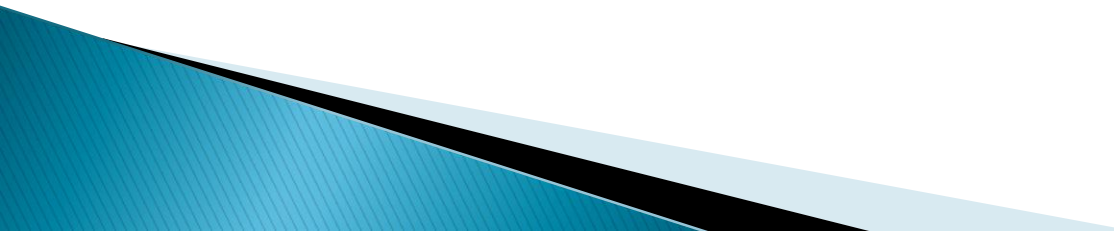
Stakeholder Introductory Meeting
July 24, 2012



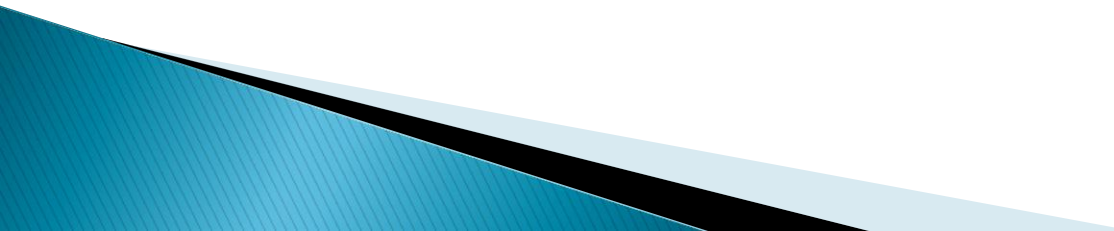
Stormwater Ordinance Timeline



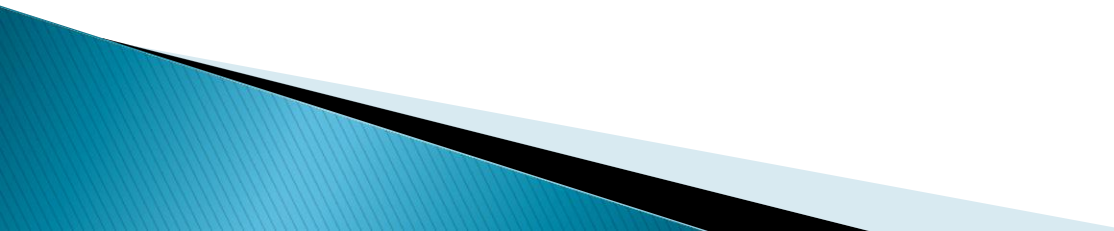
Agenda

- ▶ Stakeholder Goals and Process
 - ▶ Overview of the Regulations
 - ▶ Key Issues and Decision-Points
 - ▶ Questions and Comments
 - ▶ Next Steps
- 

Purpose

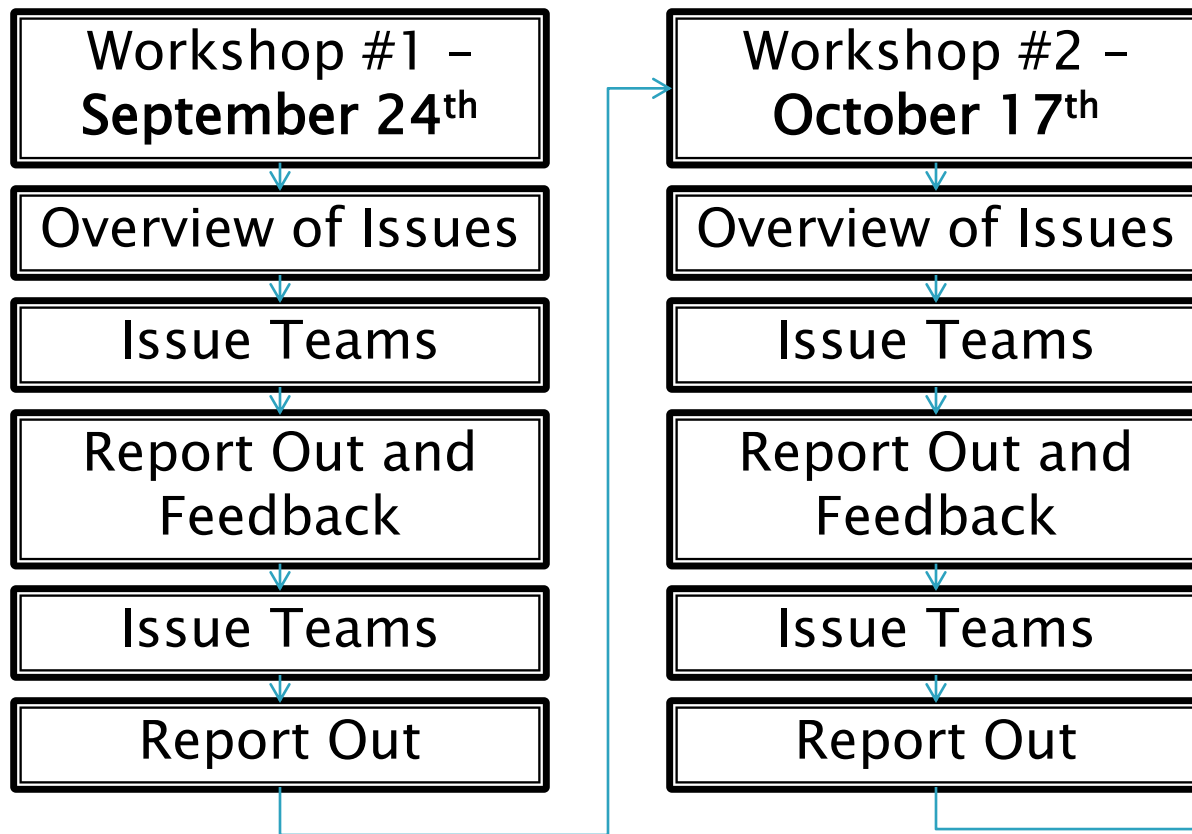
- ▶ Comply with the new Virginia Stormwater Management Regulations
 - ▶ Identify and consider:
 - Areas where the County has flexibility or may want to adopt more stringent requirements; and,
 - Opportunities to strengthen program coordination and effectiveness.
 - ▶ Stakeholder feedback will be used to inform changes presented to the Board of Supervisors.
- 

Stakeholder Input Goals

1. Identify **other issues** for discussion and consideration – what did we miss?
 2. Ensure feedback represents a **broad range of interests** and perspectives.
 3. Keep groups focused to ensure **meaningful dialogue**.
 4. Achieve **consensus where possible**; identify pros and cons where consensus is not possible.
- 

Small Group Process

Small Group Issue Workshops



Large Group/Wrap Up Meeting – January 2013

Small Group Organizations

- ▶ Associated Builders and Contractors
 - ▶ Coalition for Smarter Growth
 - ▶ Environmental Quality Advisory Committee
 - ▶ Engineers and Surveyors Institute
 - ▶ Engineering Standards Review Committee
 - ▶ Federation of Citizen Associations
 - ▶ League of Women Voters
 - ▶ Apartment and Office Building Association
 - ▶ NAIOP
 - ▶ Northern Virginia Building Industry Association
 - ▶ NOVA Soil and Water Conservation District
 - ▶ NVRC
 - ▶ Sierra Club
 - ▶ Tree Commission
 - ▶ Wetlands Board
 - ▶ Government Organizations
 - ▶ Commissions and Councils
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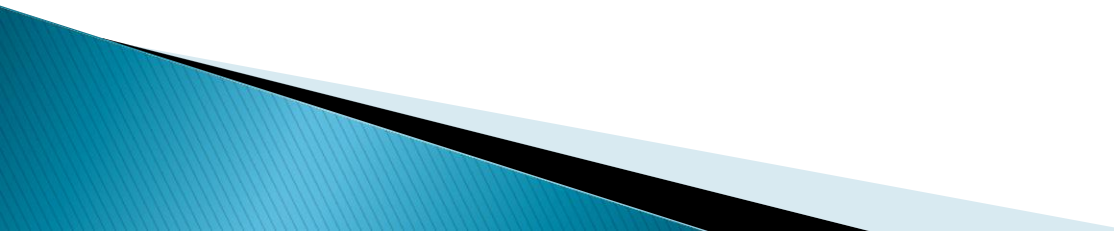
What if I am interested as an individual?

- ▶ Individuals can also self-nominate:
 - Interested Citizens
 - Large HOAs/Citizen Associations
 - Stormwater Consultants
 - District Councils
- ▶ Self nominations will be accommodated consistent with keeping groups:
 - Manageable
 - Representative

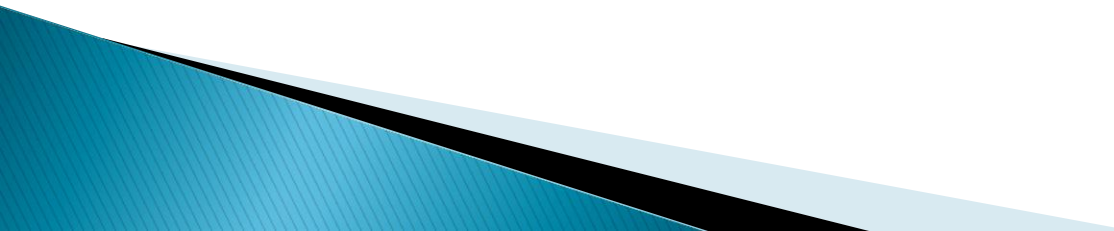
Overview of Regulations



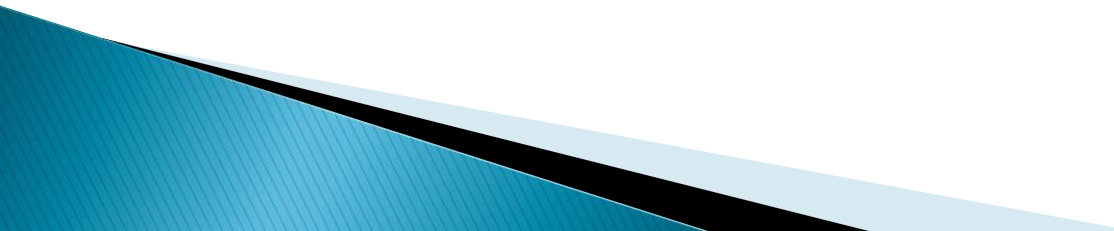
Time Line for Adoption

- ▶ Regulations effective 9/13/11.
 - ▶ Window for adoption 15 – 21 months from effective date, i.e. 12/13/12 – 6/13/13.
 - ▶ Adoption can be extended to 6/13/14 with approval of the Virginia Soil and Water Conservation Board.
 - ▶ “Go-live” date for local programs 7/1/14.
- 

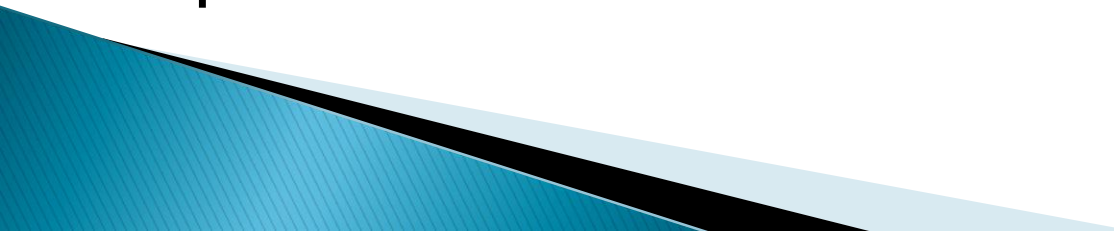
Overall Purpose of Regulations

- ▶ Maintain, protect, or improve the “physical, chemical, biological, and hydrologic characteristics and the water quality and quantity of the receiving state waters.”
 - ▶ Provide a framework for the implementation and enforcement of the Virginia Stormwater Management Act.
 - ▶ Delineate the procedures and requirements to be followed in connection with VSMP stormwater construction permits.
- 


When do the regulations apply?

- ▶ Land disturbing activities that disturb one acre or greater.
 - ▶ The regulations allow for some exemptions:
 - Clearing for agriculture, mining, and similar activities.
 - Single-family residences separately built disturbing less than one acre and not part of a larger common plan of development or sale, including additions or modifications to existing single-family detached residential structures.
 - Land disturbing activities that disturb less than one acre of land area except for activity exceeding an area of 2,500 square feet in Chesapeake Bay Preservation Areas.
- 

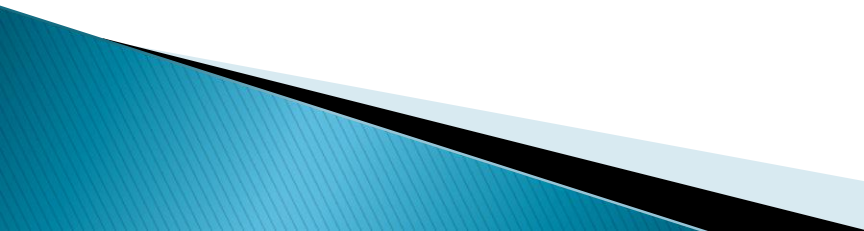
Impact on Fairfax County

- ▶ Change technical criteria for when and how development will manage stormwater runoff.
 - ▶ Require changes to County codes and engineering standards.
 - ▶ Result in changes to plan submittal, review and approval, bonding, inspections, bond release, and maintenance policies and procedures.
- 

County Ordinances/Standards

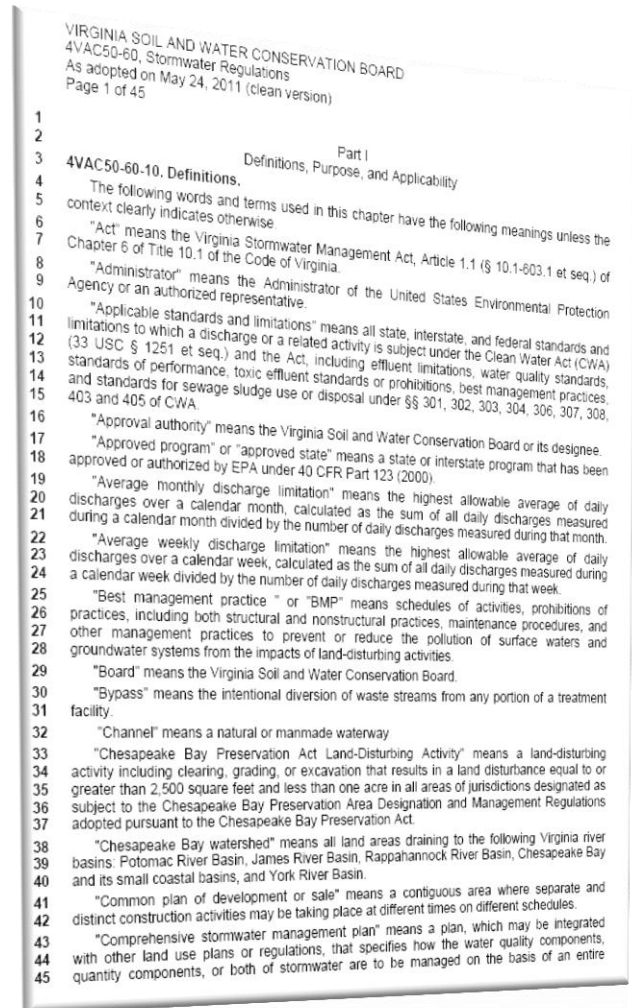
- ▶ New Stormwater Management Ordinance (Chapter 124)
 - ▶ Pollution of State Waters (Chapter 105) and Storm Drainage (Chapter 106)
 - ▶ Subdivision Ordinance (Chapter 101)
 - ▶ Erosion and Sedimentation Control (Chapter 104)
 - ▶ Zoning Ordinance (Chapter 112)
 - ▶ Chesapeake Bay Ordinance (Chapter 118)
 - ▶ Land Development Services Fees (Appendix Q)
 - ▶ Public Facilities Manual (engineering design standards)
- 

Other Implementation Activities

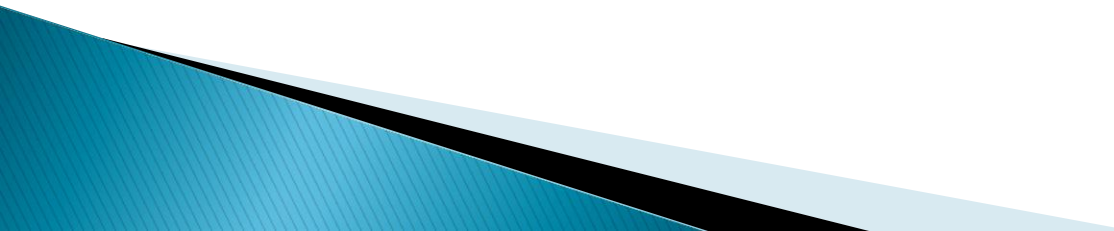
- ▶ Update plan review and inspection processes.
 - ▶ Update plans/agreements/waivers tracking system.
 - ▶ Update inspections tracking system.
 - ▶ Create an accounting/financial system or a procedure for transferring funds to state.
 - ▶ Update bonds and agreements procedures.
 - ▶ Update private maintenance agreement language.
 - ▶ Update fees.
 - ▶ Training.
 - ▶ Develop funding and staffing plan.
- 

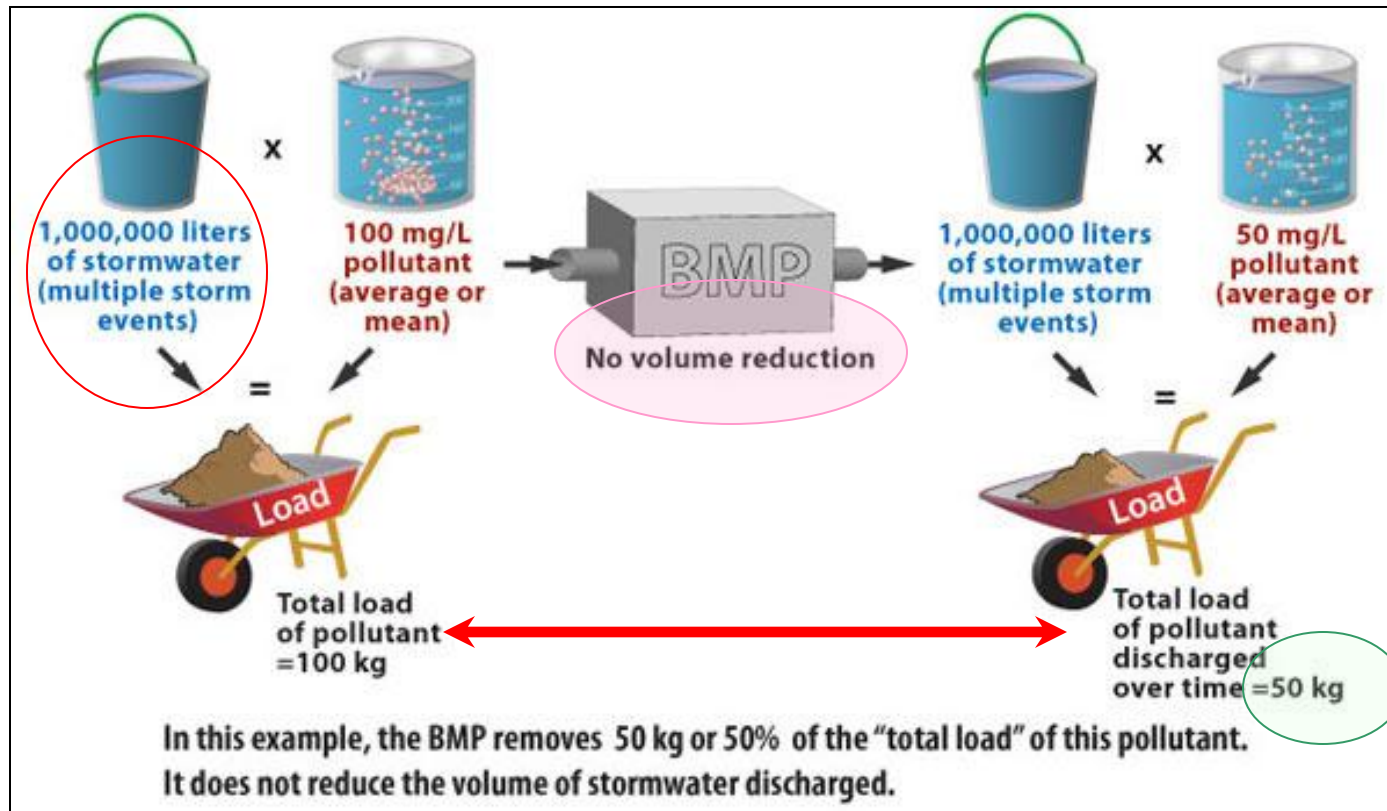
Key Provisions

- ▶ Water Quality
 - Total Phosphorus still used as benchmark pollutant
 - Runoff Reduction Method
 - New Development
 - Redevelopment
 - Offset Provisions
 - Virginia BMP Clearinghouse
- ▶ Water Quantity
 - Channel Protection
 - Flood Protection
- ▶ Grandfathering
- ▶ Plan Submittal Requirements

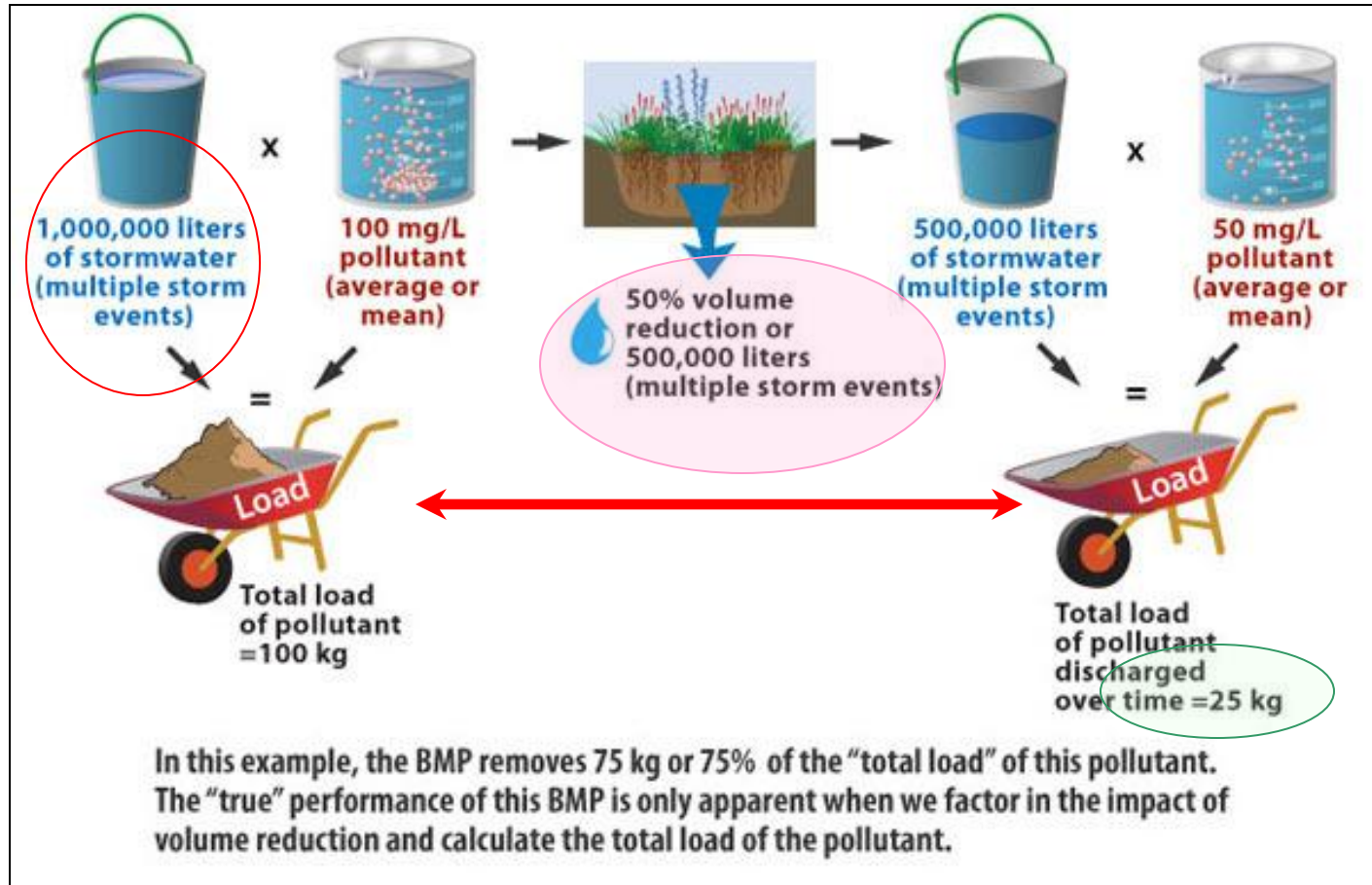


Runoff Reduction Method

- ▶ Replaces the Simple Method.
 - ▶ Determines a BMPs' capacity to capture/reduce the overall volume of runoff as well as mass pollutant removal.
 - ▶ Goal is to mimic pre-development site hydrology.
 - ▶ Incorporates built-in incentives for forest preservation and the minimization of impervious surfaces.
- 



- ▶ “Traditional” BMP pollutant removal efficiencies do not explicitly take into account the removal that occurs when the runoff volume is reduced.
- ▶ Many BMPs, such as ponds and filters, do not reduce runoff volume at all.



- ▶ Using BMPs that also provide volume reduction provides greater overall pollutant (mass load) removal.
- ▶ This reflects a "Mass Balance" approach.

Water Quality Requirements

▶ New Development

- 0.41 lbs/ac/yr total phosphorus associated with the Impervious Cover Model.
- Based on 10% impervious cover, 30% turf, and 60% forest.
- The Impervious Cover Model focuses on protecting water quality in local streams.

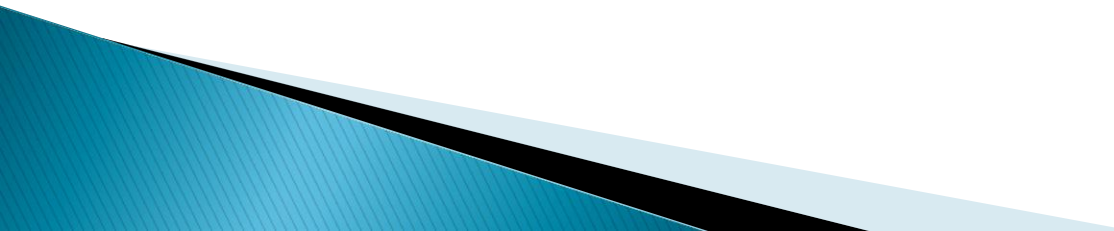
▶ Redevelopment

- 10% reduction < one acre.
- 20% reduction \geq one acre.
- Backstop: Maximum required reduction 0.41 lbs. phosphorus/acre/ year.

Water Quality Offsets

- ▶ Old rules – local governments were authorized to allow nutrient offsets under certain circumstances.
- ▶ New rules – developers are allowed to use offsets under described conditions:
 - Under five acres disturbed;
 - Less than 10 lbs reduction required; or
 - Onsite control of at least 75 percent of the required nutrient reductions.
- ▶ Offsets are not allowed for water quantity.

Practical Impacts

- ▶ Water quality control requirements are more stringent than current requirements.
 - ▶ Increase in the number of BMPs required to control stormwater quality.
 - ▶ Results:
 - Greater difficulty in meeting water quality requirements.
 - Better water quality in local streams and the Chesapeake Bay.
 - Greater long-term maintenance burden.
- 

Water Quantity Requirements

▶ Channel Protection

- Protection criteria are now situational – manmade, modified, and natural channels.

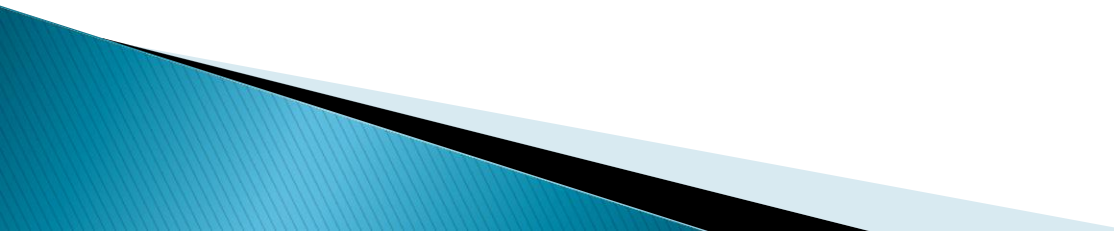
▶ Flood Protection

- Also situational – existing localized flooding vs. no existing localized flooding.
- Not well defined for natural channels.
- Less stringent than current County requirements.

▶ Increased Sheet Flow

- Must be evaluated – can't adversely impact downstream property, cause erosion, sedimentation, or flooding.
- The same as current County requirements.

Practical Impacts

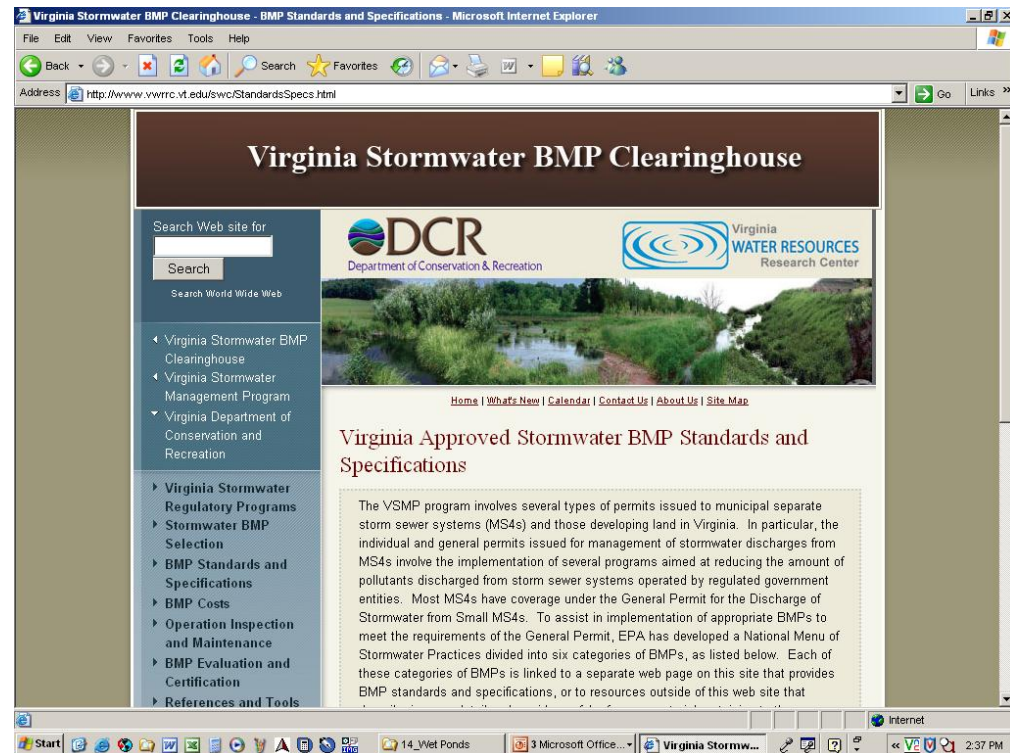
- ▶ If new minimum standards are adopted, existing flooding problems would not be addressed.
 - ▶ State requirements are geared toward providing on-site detention rather than performing downstream analysis to identify inadequacies.
- 

Grandfathering

- ▶ Use current stormwater technical criteria:
 - Plans approved before July 2012 and obtaining a VSMP permit before July 1, 2014.
 - Includes:
 - Proffered or conditional zoning plans
 - Preliminary or final subdivision plats
 - Preliminary or final site plans
 - Zonings with a plan of development
- ▶ Grandfathering ends June 30, 2019 or termination of permit.

BMP Clearinghouse

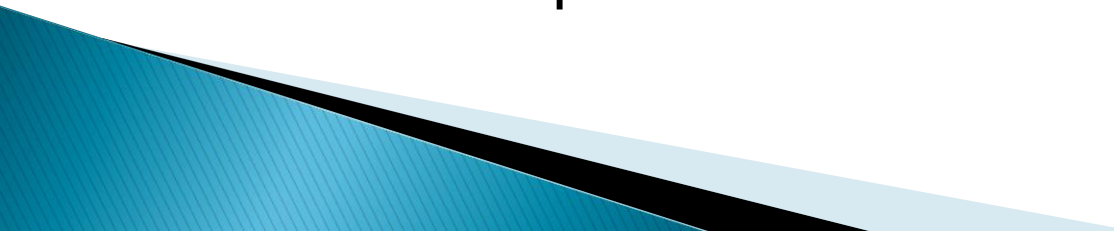
- ▶ Designs are now standardized in the Virginia BMP Clearinghouse.
- ▶ Provides more tools/flexibility.
- ▶ Doesn't match County's current PFM.



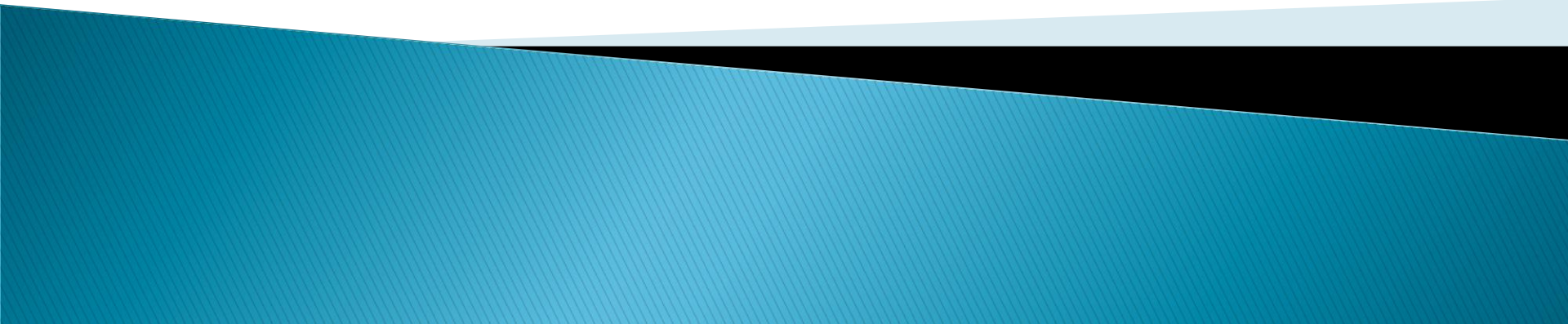
Plan Submittal Requirements

- ▶ Stormwater Pollution Prevention Plan (SWPPP)
 - Stormwater Plan
 - Erosion and Sediment Control Plan
 - Pollution Prevention Plan
 - Measures to address any TMDL WLA assigned to the construction activities.
- ▶ VSMP construction permit registration statement.
 - Not required for development under one acre and not part of larger development plan.
- ▶ County will administer VSMP construction permit including plan review and inspections.

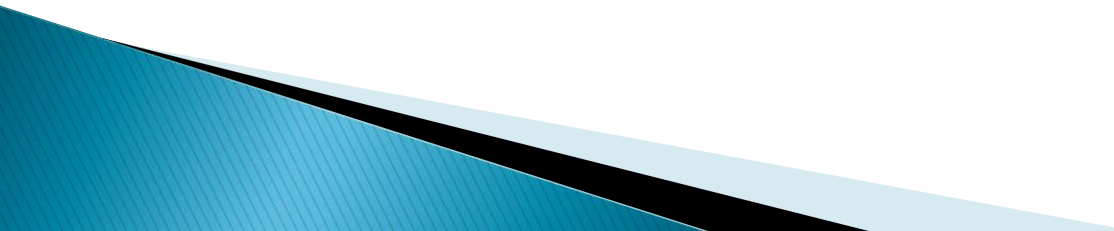
Additional Proposed Features

- ▶ Some provisions may be more stringent than minimum requirements to:
 - Be consistent with current County requirements.
 - Address County-specific goals.
 - ▶ Areas of County focus:
 - MS4 permit and Chesapeake Bay TMDL requirements.
 - Process to address non-Bay TMDLs.
 - Enforcement of private stormwater facility maintenance agreements.
 - Enhanced penalties.
- 

Stakeholder Issues



Small Group Issue Areas

- ▶ Single-Family Home Exemptions
 - ▶ Adequate Outfall Requirements
 - ▶ Maintenance in Residential Areas
 - ▶ Restrictions on Use of BMPs
 - ▶ Facility Inspections by Owners
 - ▶ Offset Provisions
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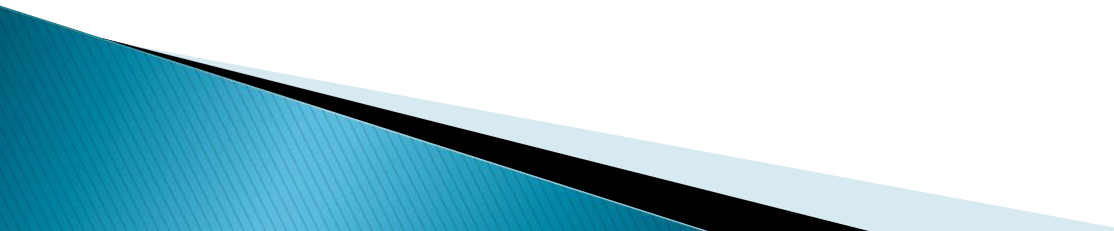
Single-Family Home Exemptions

- ▶ The Virginia Code allows an exemption for single-family properties between 2,500 SF and one acre.
- ▶ Small BMPs required under these circumstances are difficult to site, track, and enforce.
- ▶ Considerations:
 - Should the County provide an exemption?
 - If so, should it be at a cut off less than one acre (for instance 5,000 SF or greater)?
 - Instead of an exemption, should the properties be required/allowed to purchase offsets?

Adequate Outfall and Detention

- ▶ New detention provisions that eliminate the need for a downstream adequacy review are less stringent than current County PFM.
- ▶ The Virginia Code allows Fairfax County to establish a more stringent standard.
- ▶ Considerations:
 - Should the County adopt the more stringent requirements in the current PFM?

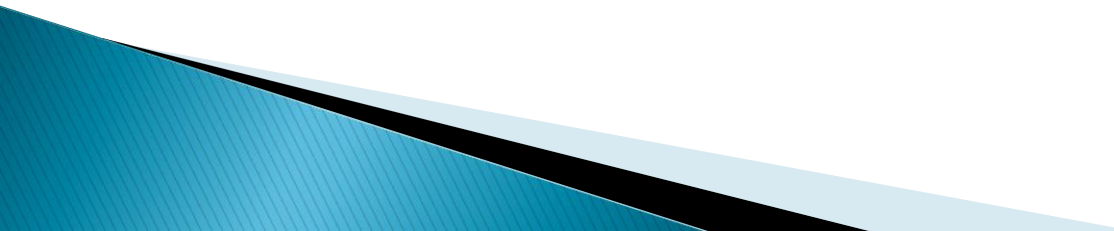
BMPs in Residential Areas

- ▶ New requirements favor implementation of smaller facilities on individual lots.
 - ▶ In general, current practice is to require facilities be placed on out-lots.
 - ▶ This may create issues and impact lot yield.
 - ▶ Considerations:
 - Should certain facilities be allowed on individual lots?
 - Who would perform maintenance (County versus HOA versus property owner)?
 - How would enforcement be handled (maintenance agreement versus other restriction)?
- 

Restrictions on Use of BMPs

- ▶ The Virginia Code and BMP Clearinghouse list the types of BMPs that may be used to meet requirements.
- ▶ Several are different than what is in the current County PFM or there is no equivalent.
- ▶ The County may restrict the use of certain BMPs with written justification.
- ▶ Considerations:
 - Should the use of certain BMPs be restricted?
 - What criteria should the County use to determine which BMPs to allow or provisionally allow?

Facility Inspections by Owners

- ▶ Virginia Code requires “submission of inspection and maintenance reports” to the County.
 - ▶ Current practice is for the County to perform a compliance inspection every five years.
 - ▶ Considerations:
 - What is a reasonable inspection and maintenance report frequency?
 - Should it be different for different BMP classifications?
 - What should be the enforcement requirements?
- 

Offset Provisions

- ▶ Virginia Code requires the County to allow nutrient offset credits under certain circumstances.
- ▶ The County maintains the ability to allow offsets under other circumstances:
- ▶ Considerations:
 - What criteria should the County use for allowing offsets. Should it be linked to land use? Ability to assure long-term maintenance?
 - How much does the County want to push offsets versus on-site facilities.

Who have we missed that should be at the table?

- ▶ Associated Builders and Contractors
 - ▶ Coalition for Smarter Growth
 - ▶ Environmental Quality Advisory Committee
 - ▶ Engineers and Surveyors Institute
 - ▶ Engineering Standards Review Committee
 - ▶ Federation of Citizen Associations
 - ▶ League of Women Voters
 - ▶ Apartment and Office Building Association
 - ▶ NAIOP
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Questions and Comments

Thank You!

[www.fairfaxcounty.gov/dpwes/
stormwaterordinance.htm](http://www.fairfaxcounty.gov/dpwes/stormwaterordinance.htm)